

ABSTRACT

A carbon heating apparatus utilizing a graphite felt and a method of manufacturing thereof are presented comprising: a carbon heater made of a carbon fiber cut having a preset
5 length and width, being performed heat treatment in a hydrogen gas atmosphere, a pair of terminal parts having a flat portion (31) at one end for connecting to outside power supply lines and clamping brackets (32) with protrusions (33) at opposite end for securely attaching to the carbon heater, and a quartz glass tube (10) with melt-jointing portions (15) for sealing both ends of the carbon heater. The manufacturing method comprises the steps: forming a
10 carbon heater by cutting carbon fiber in a preset size, heat-treating in a hydrogen gas under a high temperature and vacuum to have uniform cutting surface, inserting the heat-treated carbon heater into a quartz glass tube and injecting the hydrogen gas, baking at a high temperature to remove impurities, primary aging and secondary aging the carbon heater and sealing both ends of the quartz glass tube.